

Science Fair Resources

The Five Types of Science Fair Projects

1. Investigative

In this type of project you ask a question, construct a hypothesis, test your hypothesis using an experiment and draw conclusions from your experiment.

2. Laboratory Demonstration

In this type of project you repeat an experiment and retest a hypothesis. These experiments can be found in books, on the net or your science classrom.

3. Research and Poster

In this type of project you do extensive research on a topic, write a research paper and do a visual of the main points of what you found in your research. many times backboards are used to the visual part of this project.

4. Hobby or Collections

In this type of project you display a collection of objects or interesting artifacts so that the viewer gets a sense of knowledge about your topic. It involves library researcher but generally no hypothesis is formulated or tested. *Examples:* Rock collections, Egyption mummies.

5. Model Building

In this type of project you build a scaled model to illustrate a scientific principle. *Examples:* Shadow boxes of land formations, a model of the solar system.

From Denise Witmer, Your Guide to Parenting of Adolescents

Websites You May Want to Visit

SciFair.org - The Ultimate Science Fair Resource http://www.scifair.org/

All Science Fair Projects

http://www.all-science-fair-projects.com/

Internet Public Library: Science Fair Project Resource Guide

http://www.ipl.org/div/kidspace/projectguide/

To Find More Science Project Information

In TEL, go to **Kids InfoBits** or **Junior Edition - K12** and use the following search strategies:

Science Experiments Science Experiments - Methods Science Projects

Science Experiments - Tests, Problems and Exercises Science Experiments - Analysis

To Find More Books with Science Experiments

In your local library's online catalog, input the following subject headings:



Science Fair Resources

Science--Experiments--Juvenile Literature Science Projects

Science--Experiments--Methodology--Juvenile Literature

Science Projects--Juvenile Literature

You may also want to search for the following Series in your local library's online catalog:

Sensational Science Experiments

Chemistry! Best Science Projects

Science Fair Success

Science Project Ideas

Steps to Prepare a Science Fair Project.

1. Select a Topic

See the <u>Ideas List</u> and <u>What Makes a Good Project?</u>. Remember a Science Fair Project is a test you do to find an answer to a question, not just showing what you know about something.

2. Gather Background Information

Gather information about your topic from books, magazines, the Internet, people and companies. Keep notes about where you got your info

3. Scientific Method

State the Purpose of your experiment - What are you trying to find out?

Select a variable (something you will change/vary) that will help you find your answer.

State your Hypothesis - your guess about what the answer will be.

Decide on and describe how you will change the thing you selected.

Decide on and describe how you will measure your results.

4. Run Controlled Experiment and Record Data

Do the experiment as described above.

Keep notes in one place. Write down everything you can think of, you might need it later.

5. Graphs and Charts

What happened? Answer that question, then put the results in graphs and charts.

6. Construct an Exhibit or Display

It has to be neat, but it does NOT have to be typed.

Make it fun, but be sure people can understand what you did.

Show that you used the Scientific Method.

7. Write a short Report

Tell the story of your project - tell what you did and exactly how you did it.

Include a page that shows where you gathered background information. It can be 2 pages or even more. <u>Paper Guidelines</u> to help you out.

8. Practice Presentation to Judges

Practice explaining your project to someone (parent, friend, grandparent, etc.) This will help you be calm on Science Fair Day. The judges are very nice and will be interested in what you did and what you learned.

9. Come to the Fair and have fun! See you there!

Tips written by Yvonne Karsten - Parent and Science Fair Coordinator at Kennedy Elementary School 1994-1996.